

APPARATUS AND METHOD FOR MANUFACTURING METAL MOLD USING SEMISOLID RAPID TOOLING

ABSTRACT

An apparatus and a method for producing a mold using a semisolid rapid tooling (SRT) are disclosed. The apparatus includes a die set, a mold flask, a means for heating the die set, a pressurization plunger, a graphite heat insulating board and a pressure control means. The method includes steps of forming die steel having a lot of slits, heating the die steel to a semisolid state where a liquid phase and a solid phase are mixed, filling the semisolid die steel into a mold flask by pressurizing the semisolid die steel; and cooling the die steel filled in the mold flask.